

What is claimed is:

- 1 1. An electron gun for a color cathode ray tube, the gun comprising:
2 a cathode emitting an electron beam;
3 a control electrode having first hole regions, each one of the first hole regions including a
4 first vertically elongated indented portion formed at an output side surface of said control electrode
5 and including a first hole portion formed in the first indented portion, the electron beam passing
 through said control electrode;
 a screen electrode being installed adjacent to said control electrode, said screen electrode
 having second hole regions; and
 a plurality of focusing electrodes being sequentially installed from said screen electrode.
- 2 2. The electron gun of claim 1, the first vertically elongated indented portion being
 rectangular.
- 1 3. The electron gun of claim 2, the first hole portion having one shape selected from
2 among circular and vertically elongated, the first hole portion with the circular shape having vertical
3 and horizontal widths equal to each other, the first hole portion with the vertically elongated shape
4 having a vertical width and a horizontal width with the vertical width being greater than the
5 horizontal width.

1 4. The electron gun of claim 3, each one of the second hole regions having one shape
2 selected from among circular and vertically elongated.

1 5. The electron gun of claim 3, each one of the second hole regions including a second
2 indented portion formed at an output side surface of said screen electrode and a second hole portion
3 formed in the second indented portion, the electron beam passing through the second hole portion.

1 6. The electron gun of claim 5, the second indented portion having one shape selected
2 from among circular and vertically elongated.

1 7. The electron gun of claim 6, the second hole portion having one shape selected from
2 among circular and vertically elongated, the circular second hole portion having vertical and
3 horizontal widths equal to each other, the vertically elongated second hole portion having a vertical
4 width greater than a horizontal width.

1 8. The electron gun of claim 2, the first hole portion having one shape selected from
2 among circular and rectangular, the circular first hole portion having vertical and horizontal widths
3 equal to each other, the rectangular first hole portion having a vertical width greater than a horizontal
4 width.

1 9. The electron gun of claim 1, the first hole portion having one shape selected from
2 among circular and rectangular, the circular first hole portion having vertical and horizontal widths
3 equal to each other, the rectangular first hole portion having a vertical width greater than a horizontal
4 width.

1 10. The electron gun of claim 1, each one of the second hole regions having one shape
2 selected from among circular and vertically elongated.

1 11. The electron gun of claim 1, each one of the second hole regions including a second
2 indented portion formed at an output side surface of said screen electrode and a second hole portion
3 formed in the second indented portion, the electron beam passing through the second hole portion.
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1 12. The electron gun of claim 11, the second hole portion having one shape selected from
2 among circular and vertically elongated, the circular second hole portion having vertical and
3 horizontal widths equal to each other, the vertically elongated second hole portion having a vertical
4 width greater than a horizontal width.

1 13. An electron gun for a color cathode ray tube, the gun comprising:
2 a cathode emitting an electron beam;

3 a control electrode having first hole regions, each one of the first hole regions including a
4 first vertically elongated indented portion formed at an output side surface of said control electrode
5 and including a first hole portion formed in the first indented portion, the electron beam passing
6 through said control electrode;

7 a screen electrode being installed adjacent to said control electrode, said screen electrode
8 having second hole regions; and

9 a plurality of focusing electrodes forming a plurality of quadrupole lenses, said focusing
10 electrodes being sequentially installed from said screen electrode and respectively forming electron
11 beam passing holes having a predetermined shape.

12 14. The electron gun of claim 13, said focusing electrodes comprising:
13 first, second, and third focusing electrodes, respectively having electron beam passing holes
14 forming a predetermined shape;

15 a fourth focusing electrode being installed adjacent to said third focusing electrode, said
16 fourth focusing electrode forming a first quadrupole lens; and

17 a fifth focusing electrode being installed adjacent to said fourth focusing electrode, said fifth
18 focusing electrode forming a second quadrupole lens.

19 15. The electron gun of claim 14, further comprising a final acceleration electrode being
20 installed adjacent to said fifth focusing electrode, said final acceleration electrode forming a main

lens.

16. The electron gun of claim 15, said third and fourth focusing electrodes each having output side surfaces forming vertically elongated electron beam passing holes, said fourth and fifth focusing electrodes each having input side surfaces forming horizontally elongated electron beam passing holes, a constant voltage being applied to said screen electrode and said second focusing electrode, a focusing voltage higher than the constant voltage being applied to said first focusing electrode and said fourth focusing electrode, a dynamic focusing voltage using the focusing voltage as a base voltage being applied to said third and fifth focusing electrodes.

17. The electron gun of claim 16, each one of the second hole regions including a second indented portion formed at an output side surface of said screen electrode and a second hole portion formed in the second indented portion, the electron beam passing through the second hole portion.

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